

# X-RAY PERIODIC CHART

<sup>1</sup> H 1.008																		<sup>2</sup> He 4.003			
<sup>3</sup> Li 6.939	<sup>4</sup> Be 9.012	<div style="border: 1px solid blue; padding: 5px; display: inline-block;"> <b>Atomic Symbol</b>                  Atomic Number                  Atomic Weight                  Spectrum Wavelength Å                  Analyzing Crystal 2θ Angle                  Excitation Voltage (KeV)             </div>														<sup>5</sup> B 10.811	<sup>6</sup> C 12.011	<sup>7</sup> N 14.007	<sup>8</sup> O 15.999	<sup>9</sup> F 18.998	<sup>10</sup> Ne 20.183
<sup>11</sup> Na 22.990	<sup>12</sup> Mg 24.312	The Model 2501XBT Portaspec® can analyze all of the elements outlined in blue.  The Model 2501XLE Portaspec® can analyze all of the elements outlined in red.														<sup>13</sup> Al 26.982 Kα 8.338 PET 144.67° 1.56	<sup>14</sup> Si 28.086 Kα 7.126 PET 109.06° 1.84	<sup>15</sup> P 30.974 Kα 6.155 Ge 110.68° 2.14	<sup>16</sup> S 32.064 Kα 5.373 Ge 92.76° 2.47	<sup>17</sup> Cl 35.453 Kα 4.729 Ge 92.76° 2.82	<sup>18</sup> Ar 39.948
<sup>19</sup> K 39.102 Kα 3.724 LiF 136.68° 3.61	<sup>20</sup> Ca 40.08 Kα 3.359 LiF 113.08° 4.04	<sup>21</sup> Sc 44.956 Kα 3.032 LiF 97.71° 4.50	<sup>22</sup> Ti 47.90 Kα 2.750 LiF 86.12° 4.95	<sup>23</sup> V 50.942 Kα 2.505 LiF 76.92° 5.45	<sup>24</sup> Cr 51.996 Kα 2.291 LiF 69.35° 5.98	<sup>25</sup> Mn 54.938 Kα 2.103 LiF 62.97° 6.54	<sup>26</sup> Fe 55.847 Kα 1.937 LiF 57.52° 7.10	<sup>27</sup> Co 58.993 Kα 1.790 LiF 52.79° 7.71	<sup>28</sup> Ni 58.71 Kα 1.659 LiF 48.67° 8.29	<sup>29</sup> Cu 63.54 Kα 1.542 LiF 45.02° 8.86	<sup>30</sup> Zn 65.37 Kα 1.436 LiF 41.81° 9.65	<sup>31</sup> Ga 69.72 Kα 1.341 LiF 38.90° 10.4	<sup>32</sup> Ge 72.59 Kα 1.255 LiF 36.34° 11.1	<sup>33</sup> As 74.922 Kα 1.177 LiF 33.98° 11.9	<sup>34</sup> Se 78.96 Kα 1.106 LiF 31.87° 12.7	<sup>35</sup> Br 79.909 Kα 1.041 LiF 29.96° 13.5	<sup>36</sup> Kr 83.80				
<sup>37</sup> Rb 85.47 Kα .9269 LiF 26.62° 15.7	<sup>38</sup> Sr 87.62 Kα .8766 LiF 25.15° 16.1	<sup>39</sup> Y 88.905 Kα .8302 LiF 23.80° 17.0	<sup>40</sup> Zr 91.22 Kα .7873 LiF 22.55° 18.0 Lα 6.0705 Ga 136.67° 2.55	<sup>41</sup> Nb 92.906 Kα .7476 LiF 21.40° 19.0	<sup>42</sup> Mo 95.94 Kα .7107 LiF 20.33° 20.0	<sup>43</sup> Tc 99 Kα .6744 LiF 19.28° 21.1	<sup>44</sup> Ru 101.07 Kα .6445 LiF 18.42° 22.1	<sup>45</sup> Rh 102.905 Kα .6147 LiF 17.56° 23.2	<sup>46</sup> Pd 106.4 Kα .5869 LiF 16.76° 24.4	<sup>47</sup> Ag 107.870 Kα .5608 LiF 16.01° 25.5	<sup>48</sup> Cd 112.40	<sup>49</sup> In 114.82	<sup>50</sup> Sn 118.69	<sup>51</sup> Sb 121.75	<sup>52</sup> Te 127.60	<sup>53</sup> I 126.904	<sup>54</sup> Xe 131.30				
<sup>55</sup> Cs 132.905	<sup>56</sup> Ba 137.34 Lα 2.775 LiF 87.13° 6.00	<sup>57</sup> La 138.91 Lα 2.665 LiF 82.88° 6.26	<sup>72</sup> Hf 178.49 Lα 1.570 LiF 44.41° 11.3	<sup>73</sup> Ta 180.948 Lα 1.522 LiF 44.41° 11.7	<sup>74</sup> W 183.85 Lα 1.476 LiF 43.02° 12.1	<sup>75</sup> Re 186.2 Lα 1.433 LiF 41.69° 12.5	<sup>76</sup> Os 190.2 Lα 1.391 LiF 40.42° 13.0	<sup>77</sup> Ir 192.2 Lα 1.351 LiF 39.22° 13.4	<sup>78</sup> Pt 195.09 Lα 1.313 LiF 38.06° 13.9	<sup>79</sup> Au 196.967 Lα 1.276 LiF 36.96° 14.4	<sup>80</sup> Hg 200.59 Lα 1.241 LiF 35.90° 14.8	<sup>81</sup> Tl 204.37 Lα 1.207 LiF 34.90° 15.3	<sup>82</sup> Pb 207.19 Lα 1.175 LiF 33.92° 15.8	<sup>83</sup> Bi 208.980 Lα 1.144 LiF 33.01° 16.4	<sup>84</sup> Po 210 Lα 1.114 LiF 32.11° 16.9	<sup>85</sup> At 210 Lα 1.085 LiF 31.26° 17.5	<sup>86</sup> Rn 222				
<sup>87</sup> Fr 223 Lα 1.030 LiF 29.64° 18.6	<sup>88</sup> Ra 226 Lα 1.005 LiF 28.90° 19.3	<sup>89</sup> Ac 227 Lα .9799 LiF 28.17° 19.8	<sup>58</sup> Ce 140.12 Lα 2.561 LiF 79.00° 6.54	<sup>59</sup> Pr 140.907 Lα 2.463 LiF 75.44° 3.83	<sup>60</sup> Nd 144.24 Lα 2.370 LiF 72.11° 7.12	<sup>61</sup> Pm 147 Lα 2.282 LiF 69.07° 7.45	<sup>62</sup> Sm 150.35 Lα 2.199 LiF 66.22° 7.73	<sup>63</sup> Eu 151.96 Lα 2.121 LiF 63.56° 8.04	<sup>64</sup> Gd 157.25 Lα 2.046 LiF 61.08° 8.37	<sup>65</sup> Tb 158.924 Lα 1.976 LiF 58.76° 8.70	<sup>66</sup> Dy 162.50 Lα 1.909 LiF 56.59° 9.03	<sup>67</sup> Ho 164.930 Lα 1.845 LiF 54.53° 9.38	<sup>68</sup> Er 167.26 Lα 1.784 LiF 52.61° 9.73	<sup>69</sup> Tm 168.934 Lα 1.726 LiF 50.77° 10.1	<sup>70</sup> Yb 173.04 Lα 1.672 LiF 49.06° 10.5	<sup>71</sup> Lu 174.97 Lα 1.619 LiF 47.43° 10.9					
<sup>90</sup> Th 232.038 Lα .956 LiF 27.47° 20.5	<sup>91</sup> Pa 231 Lα .9328 LiF 26.79° 21.1	<sup>92</sup> U 238.03 Lα .9105 LiF 26.14° 21.7	<sup>93</sup> Np 237	<sup>94</sup> Pu 244	<sup>95</sup> Am 243	<sup>96</sup> Cm 247	<sup>97</sup> Bk 247	<sup>98</sup> Cf 251	<sup>99</sup> Es 254	<sup>100</sup> Fm 253	<sup>101</sup> Md 256	<sup>102</sup> No 257	<sup>103</sup> Lw 257								